

Isaac S. Narrett

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Education

Massachusetts Institute of Technology (MIT)	Cambridge, MA, 2021-
Ph.D., Planetary Science	
University of Michigan	Ann Arbor, MI, 2017-2021
B.S.E., Physics, <i>summa cum laude</i>	
Minor, Space Science Engineering	

Employment

Massachusetts Institute of Technology (MIT)	Cambridge, MA, 2021-
Graduate Student Researcher	
Battelle Memorial Institute	Columbus, OH, Summer 2020
Engineering Modeler Intern	
University of Michigan	Ann Arbor, MI, 2017-2021
Moldwin Magnetics Lab Research Assistant	

Teaching and Mentorship

Undergrad research mentor, <i>magnetometer design</i> , MIT UROP	Spring 2026
Co-advisor for Master's student, <i>rover magnetometer modeling</i> , MIT AeroAstro	Fall 2025-2026
Undergrad research mentor, <i>rover magnetometer modeling</i> , MIT UROP	Summer, Fall 2025
Summer mentor, <i>magnetometer data analysis</i> , Haverford College Student	Summer 2025
Graduate Teaching Assistant, Hands-on Astronomy	Spring 2024, 2025
<i>Polygence</i> Paid Mentor, King's College School, UK	Summer 2025
Mentor, Cambridge High School Student	Summer 2024

Professional Experience

Executive secretary and external reviewer for NASA program review panel	Spring 2025
AGU <i>Planetary Magnetism</i> session convener	Winter 2025
Co-Reviewer for <i>Philosophical Transactions of the Royal Society A</i>	Winter 2024
Lunar Planetary Science Conference <i>Mercury from the Inside Out</i> moderator	Spring 2025

Honors, Grants, and Awards

Co-I on James Webb Space Telescope (JWST) Cycle 4 DD Proposal	<i>Selected</i> 2025
Elected to Sigma Xi	2025
NASA FINESST Fellow Award	2023-2025
MIT - James L. Elliot Fellowship	2023
MIT - Presidential Fellowship	2021
Michigan - Al Levinson Memorial Scholarship	2020-2021
Michigan - Guezner Engineering Merit Scholarship	2019-2020

Service and Outreach

Proposal team, MIT QoL <i>Selected</i> Grant - K-12 Outreach Kit	Spring 2025
Visitor, Amigos School and Manning Elementary School	Spring 2024, 2025
Organizer, MIT EAPS Planetary Lunch Seminar	2023-
Organizer, Cambridge Science Carnival	2022-2025

Journal Articles

Published:

- **Narrett, I. S.**, Oran, R., Chen, Y., Miljkovic, K., Toth, G., Mansbach, E. N., Weiss, B. P. (2025). Impact plasma amplification of the ancient lunar dynamo. *Science Advances*. Space.com Article
- **Narrett, I. S.**, Rackham, B. V., de Wit, J. (2024). Axisymmetric High Spot Coverage on Exoplanet Host HD 189733 A. *The Astronomical Journal*.
- Strabel, B. P., Regoli, L. H., Moldwin, M. B., Ojeda, L. V., Shi, Y., Thomas, J. D., **Narrett, I. S.**, et al. (2022). Quad-Mag board for CubeSat applications. *Geoscientific Instrumentation, Methods and Data Systems*.

In Review/Preprint:

- **Narrett, I. S.**, Oran, R., Chen, Y., Miljkovic, K., Toth, G., Johnson, C. L., Weiss, B. P. (2025). Impact plasma amplification of the ancient Mercury magnetic field. *In Review at JGR Planets*. arXiv
- **Narrett, I. S.**, Weiss, B. P., Steele, S. C., Biersteker, J. B. (2025). Mercury Crustal Magnetization Requires a Stronger Ancient Dynamo. *In Review at Science Advances*. arXiv

In Prep:

- Schneck, U. G., Biersteker, J. B., **Narrett, I. S.**, Jia, X., Weiss, B. P. Confirmation of an ocean on Callisto using Bayesian reanalysis of Galileo induction measurements.

Invited Talks

Lunar Impact-Plasma Dynamo Amplification and Future Tests, AGU Winter Conference	2025
Magnetizing the Moon and Mercury, UC Berkeley Planetary Science Seminar	2025
The Uranian Magnetosphere, Denmark Technical University	2024

Conference Presentations (*Talk Given)

- Weiss, B. P., Chaffee, T. M., Gattacceca, J., Tikoo, S. M., McDonald, C., Hodges, K. V., Lepaulard, C., Miljković, K., **Narrett, I. S.**, Evidence for a long-lived lunar dynamo. *7th Beijing Earth and Planetary Interior Symposium* (2025)
- ***Narrett, I. S.** et al., Mercury's Ancient Crustal Magnetization: A Stronger Dynamo can be Confirmed by Future BepiColombo Measurements. *EPSC-DPS Joint Meeting* (2025)
- Weiss, B. P., Merayo, J. M. G., Jørgensen, J. L., ***Narrett, I. S.**, Heritage Magnetometers for the Uranus Orbiter and Probe from the Technical University of Denmark. *6th International Workshop on Instrumentation for Planetary Missions* (2025)
- ***Narrett, I. S.** et al., Does Mercury's Ancient Crustal Magnetization Require a Stronger Ancient Dynamo? *Lunar and Planetary Science Conference* (2025)
- **Narrett, I. S.** et al., HST and TESS point to a highly spotted photosphere for HD189733A. *TESS Science Conference III* (2024)
- ***Narrett, I. S.** et al., Lunar Crustal Magnetization from Impact-Generated Plasma Amplification of the Lunar Dynamo. *Lunar and Planetary Science Conference* and *AGU Fall Meeting* (2024)
- **Narrett, I. S.** et al., Testing Whether a Dynamo Magnetic Field Amplified by Impact Plasmas Can Explain the Magnetization of the Moon. *Lunar and Planetary Science Conference* and *ASTRONUM* (both in 2023)